

A MODEL RECOVERY AND RECONSTRUCTION ORDINANCE (Revised 1-9-96)

Prepared for FEMA/APA by Kenneth C. Topping, AICP

This model recovery and reconstruction ordinance follows the principles established elsewhere in this PAS report. It provides basic elements of a comprehensive ordinance establishing a recovery organization and authorizing a variety of pre- and post-event planning and regulatory powers and procedures related to disaster recovery and reconstruction. Designed to be adopted in advance of a major disaster, it can also be quickly adapted to post-disaster conditions if it has not been adopted before the disaster.

Unlike ordinary planning ordinances, this ordinance requires involvement by many other departments within the city or county government organization under the guidance and leadership of the city manager, county administrative officer, or equivalent position. Some of the actions called for by this ordinance require direct involvement of the planning department, although frequently acting in concert with other departments. Having an inherently inter-departmental focus, this ordinance structures a model ***process*** which has generic value. Due to widely ranging circumstances, however, the content may vary considerably.

The essential concepts of this ordinance include: the establishment of a recovery organization before a major disaster to prepare a pre-event plan; the adoption of that plan and this ordinance by the governing body before a major disaster occurs; and the use of the recovery plan and organization to efficiently and wisely guide post-disaster recovery and reconstruction activity. The recovery

organization may be constructed differently from place to place, but the idea is to create an ongoing organization integrated with, but extending beyond any existing emergency operations organization.

Although an existing emergency operations organization may serve as a useful base from which to fashion a recovery organization, there are certain fundamental differences in function which make it preferable to establish a recovery organization which operate parallel to the emergency response organization. Continuity of the recovery organization and expediting of the rebuilding processes for which it is responsible become very important.

1) With some exceptions, local government emergency response organizations tend to focus on emergency preparedness and response operations. Strongly oriented toward police and fire functions, during "peace-time" they characteristically handle routine local emergencies and undertake training and preparedness for disaster response operations. Typically, recovery and reconstruction functions do not fall within their purview, although this is beginning to change in some jurisdictions.

2) Some powers reflected by this ordinance are activated by the declaration of a local emergency. However, they are characteristically broader than emergency response powers because the latter do not include property, building, land use and development regulations, or the public hearing process.

3) Certain regulatory powers authorized by this ordinance are identified for initial implementation during the time in which a declaration of local emergency is in effect. However, such powers tend to be extended for much longer periods of time.

Although a declared emergency may not be terminated for months after the end of emergency response operations, complete implementation of rebuilding processes often takes years.

In short, this is an emerging area of disaster management practice which crosses over into city planning, redevelopment and building. Much of the thinking and implementation for the processes identified in this ordinance have only emerged within professional literature or practice within the past decade. Although some form of ad hoc recovery organization is created with every major disaster, such arrangements tend to exist for the peak rebuilding period and then are disbanded. As yet, very few local jurisdictions have formally created recovery organizations in advance of a disaster or maintained them continuously afterwards.

This ordinance structures many processes which tend to take place anyway after a major disaster without forethought or knowledge of available options. It provides organizational and procedural dimensions which can accelerate fundamental thinking and planning needed in advance of a disaster to recover and rebuild more wisely and efficiently than would happen were such preparation not to occur. It captures the broadest possible range of pre-event and post-disaster activities which interact with urban planning and development, recognizing that not all provisions may be germane to circumstances within individual communities.

There is little established practice of record to use as a point of departure. Few ordinances in use by local jurisdictions deal with such a broad scope of recovery functions. Those which have been adopted tend to cover a more limited range of

elements, such as rebuilding permitting and nonconforming use procedures. With the upswing in major disasters in the last several years, however, substantial experimentation is taking place, and more communication is occurring regarding outcomes of various recovery strategies attempted.

These processes will inevitably lead to revisions of the ideas reflected here. Therefore, this ordinance should be considered a framework for flexible application of pre-event and post-event procedures which can be modified to fit emerging ideas as well as local conditions. Although a separate ordinance is not essential to performance of many functions represented, the value of adopting a recovery ordinance is in providing clear policy guidance in advance for dealing with contingencies as well as an overall rationale in case of legal challenge.

The following ordinance language is interspersed with italicized commentaries which provide alternatives or amplification. Commentaries sometimes identify areas for possible modification or explain reasons why certain provisions are included. Commentary has been omitted for sections that are self-explanatory or unlikely to require change. Certain conventions have been included throughout which will require change by some local governments. The term “city” will require replacement with the correct term for county or town governments. The numbering system is designed to reflect the structure of the ordinance content and may require adaptation to the numbering of local ordinances.

Chapter ____. Disaster Recovery and Reconstruction

- Section 1. Authority
- Section 2. Purposes
- Section 3. Definitions
 - 3.1 Damage Assessment Survey
 - 3.2 Development Moratorium
 - 3.3 Director
 - 3.4 Disaster Assistance Centers (DACs)
 - 3.5 Disaster Field Office
 - 3.6 Disaster Survey Report (DSR)
 - 3.7 Emergency
 - 3.8 Event
 - 3.9 Federal Response Plan (FRP)
 - 3.10 Flood Insurance Rate Map (FIRM)
 - 3.11 Hazard Mitigation Grant program
 - 3.12 Historic Building or Structure
 - 3.13 Individual Assistance Program
 - 3.14 In-Kind
 - 3.15 Major Disaster
 - 3.16 Multi-Agency Hazard Mitigation Team
 - 3.17 Public Assistance Program
 - 3.18 Reconstruction
 - 3.19 Recovery
 - 3.20 Recovery Operations
 - 3.21 Recovery Plan
 - 3.22 Recovery Strategy
 - 3.23 Safety Element
 - 3.24 Stafford Act
- Section 4. Recovery Organization
 - 4.1 Powers and Duties
 - 4.2 Recovery Task Force
 - 4.3 Operations and Meetings
 - 4.4 Succession
 - 4.5 Organization
 - 4.6 Relation to Emergency Management Organization
- Section 5. Recovery Plan
 - 5.1 Recovery Plan Content
 - 5.2 Coordination of Recovery Plan with FEMA and Other Agencies
 - 5.3 Recovery Plan Adoption
 - 5.4 Recovery Plan Implementation
 - 5.5 Recovery Plan Training and Exercises
 - 5.6 Recovery Plan Consultation with Citizens

- 5.7 Recovery Plan Amendments
- 5.8 Recovery Plan Coordination with Related (City, County) Plans
- Section 6. General Provisions
 - 6.1 Powers and Provisions
 - 6.2 Post-Disaster Operations
 - 6.3 Coordination with FEMA and Other Agencies
 - 6.4 Consultation with Citizens
- Section 7. Temporary Regulations
 - 7.1 Duration
 - 7.2 Damage Assessment
 - 7.3 Development Moratorium
 - 7.4 Debris Clearance
 - 7.5 One-Stop Center for Permit Expediting
 - 7.6 Temporary Use Permits
 - 7.7 Temporary Repair Permits
 - 7.8 Deferral of Fees for Reconstruction Permits
 - 7.9 Nonconforming Buildings and Uses
- Section 8. Demolition of Damaged Historic Buildings
 - 8.1 Condemnation and Demolition
 - 8.2 Notice of Condemnation
 - 8.3 Request to FEMA to Demolish
 - 8.4 Historic Building Demolitions Review
- Section 9. Temporary and Permanent Housing
- Section 10. Hazard Mitigation Program
 - 10.1 Safety Element
 - 10.2 Short-Term Action Program
 - 10.3 Post-Disaster Actions
 - 10.4 New Information
- Section 11. Recovery and Reconstruction Strategy
 - 11.1 Functions
 - 11.2 Review
- Section 12. Severability

WHEREAS, the city is vulnerable to various natural hazards such as earthquakes, flooding, wildfires, and wind, resulting in major disasters causing substantial loss of life and property;

WHEREAS, the city is authorized under state law to declare a local state of local emergency and take actions necessary to ensure the public safety and well-being of its residents, visitors, business community and property during and after such major disasters;

WHEREAS, it is essential to the well being of the city to expedite recovery and reconstruction, mitigate hazardous conditions, and improve the community after such major disasters;

WHEREAS, disaster recovery and reconstruction can be facilitated by establishment of a Recovery Organization within the city government to plan, coordinate and expedite recovery activities;

WHEREAS, preparation of a pre-event plan for disaster recovery and reconstruction can help the city organize to expedite recovery in advance of a major disaster and to identify and mitigate hazardous conditions, both before and after such a disaster;

WHEREAS, recovery can be expedited by pre-event adoption of an ordinance authorizing certain extraordinary city actions to be taken during the declared local emergency to expedite implementation of recovery and reconstruction measures identified in a pre-event plan;

WHEREAS, it is mutually beneficial to cooperatively plan relationships needed between the city and other governmental authorities such as the Federal Emergency Management Agency, Small Business Administration, Department of Housing and Urban Development, State Emergency Management Agency (or equivalent);

WHEREAS, it is informative and productive to consult with representatives of business, industry and citizens' organizations regarding the most suitable and helpful approaches to disaster recovery and reconstruction;

The City Council (or county or town equivalent) does hereby ordain:

Section 1. Authority. This ordinance is adopted by the City Council (or county or town equivalent) acting under authority of the City Municipal Code (or county or town equivalent), State Emergency Management Act (or equivalent), and all applicable federal laws and regulations.

Section 2. Purposes. It is the intent of the City Council under this chapter to: authorize creation of an organization to plan and prepare in advance of a major disaster for orderly and expeditious post-disaster recovery and to direct and coordinate recovery and reconstruction activities; direct the preparation of a pre-event plan for post-disaster recovery and reconstruction to be updated on a continuing basis; authorize in advance of a major disaster the exercise of certain planning and regulatory powers related to disaster recovery and reconstruction to be implemented upon declaration of a local emergency; identify means by which the city will take cooperative action with other governmental entities in expediting recovery; and implement means by which the city will consult with and assist citizens, businesses and community organizations during the planning and implementation of recovery and reconstruction procedures.

Section 3. Definitions. As used in this ordinance, the following definitions shall apply:

3.1 Damage Assessment Survey. A field survey to determine levels of damage for structures and/or to post placards designating the condition of structures.

3.2 Development Moratorium. A temporary hold, for a defined period of time, on the issuance of building permits, approval of land use applications or other permits and entitlements related to the use, development and occupancy of private property in the interests of protection of life and property.

3.3 Director shall mean the Director of Recovery Operations or an authorized representative.

3.4 Disaster Assistance Centers (DACs). A multi-agency center organized by FEMA for coordinating assistance to disaster victims.

3.5 Disaster Field Office (DFO). A center established by FEMA for coordinating disaster response and recovery operations, staffed by representatives of federal, state and local agencies as identified in the Federal Response Plan (FRP) and determined by disaster circumstances.

3.6 Disaster Survey Report (DSR) shall mean a claim by a local jurisdiction for financial reimbursement for repair or replacement of a public facility damaged in a major disaster, as authorized under the Stafford Act and related federal regulations, plans and policies.

3.7 Emergency shall mean a local emergency, as defined by the Municipal Code, which has been declared by the City Council for a specific disaster and has not been terminated.

3.8 Event shall mean any natural occurrence which results in the declaration of a state of emergency and shall include earthquakes, fires, floods, wind storms, tsunamis, etc.

3.9 Federal Response Plan (FRP). A plan prepared by FEMA and over two dozen other federal departments and agencies to coordinate efforts of a large number of federal, state and local agencies in providing response and recovery assistance in an expeditious manner.

3.10 Flood Insurance Rate Map (FIRM). A map showing the outer boundaries of the floodway and floodplain as determined by the FEMA Flood Insurance Administration through the Flood Insurance Rate Map program.

3.11 Hazard Mitigation Grant Program. A program for assistance to federal, state and local agencies whereby a grant is provided by FEMA as an incentive for implementing mutually desired mitigation programs, as authorized by the Stafford Act and related federal regulations, plans and policies.

3.12 Historic Building or Structure shall mean any building or structure included on the national register of historic places, the state register of historic places or points of interest, or a local register of historic places, and any buildings and structures having historic significance within a recognized historic district.

3.13 Individual Assistance Program. A program for providing small grants to individuals and households affected by a disaster to offset loss or equipment, damage to homes, or the cost of relocation to another home, as authorized under the Stafford Act and related federal regulations.

3.14 In-Kind shall mean the same as the prior building or structure in size, height and shape, type of construction, number of units, general location and appearance.

3.15 Major Disaster shall mean a locally declared emergency also proclaimed as a state of emergency by the Governor of the State and by the President of the United States.

3.16 Multi-Agency Hazard Mitigation Team. A team of representatives from FEMA, other federal agencies, state emergency management agencies and related state and local agencies, formed to identify, evaluate and report on post-disaster mitigation needs.

3.17 Public Assistance Program. A program for providing reimbursement to federal, state and local agencies and non-profit organizations for repair and replacement of facilities lost or damaged in a disaster, as authorized under the Stafford Act and related federal regulations, plans and policies.

3.18 Reconstruction shall mean the rebuilding of permanent replacement housing, construction of large-scale public or private facilities badly damaged or destroyed in a major disaster, addition of major community improvements, and full restoration of a healthy economy.

3.19 Recovery shall mean the process by which most of private and public buildings and structures not severely damaged or destroyed in a major disaster are repaired and most public and commercial services are restored to normal.

3.20 Recovery Organization. An interdepartmental organization which coordinates city staff actions in planning and implementing disaster recovery and reconstruction functions.

3.21 Recovery Plan. A pre-event plan for post-disaster recovery and reconstruction, comprised of policies, plans, implementation actions, and designated responsibilities related to expeditious and orderly post-disaster recovery and rebuilding, as well as long-term mitigation.

3.22 Recovery Strategy. A post-disaster strategic program identifying and prioritizing major actions contemplated or under way regarding such essential recovery functions as business resumption, economic reinvestment, industrial recovery, housing replacement, infrastructure restoration, and potential sources of financing to support these functions.

3.23 Safety Element. An element of the comprehensive, long-term general plan for the physical development of a community which addresses protection of the community from unreasonable risks associated with the effects of earthquakes, landslides, flooding, wildland and urban fires, wind, coastal erosion, and other natural and technological disasters.

3.24 "Stafford Act" shall mean the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended).

Section 4. Recovery Organization. There is hereby created the Recovery Organization, for the purpose of coordinating city actions in planning and implementing disaster recovery and reconstruction activities.

4.1 Powers and Duties. The Recovery Organization shall have such powers as enable it to carry out the purposes, provisions and procedures of this Chapter, as identified in this chapter.

4.2 Recovery Task Force. The Recovery Organization shall include a Recovery Task Force comprised of the following officers and members:

- a. The Mayor (or county or town equivalent) who shall be Chair;
- b. The City Manager (or county or town equivalent) who shall be Director and Vice-Chair;
- c. The Assistant City Manager who shall be Deputy Director, and who shall act as Vice-Chair in the absence of the City Manager;
- d. The City Attorney (or county or town equivalent) who shall be Legal Adviser;
- e. Other members, including the Building Official, City Engineer, Community Development/Planning Director, Fire Chief, Emergency Management Coordinator, General Services Director, Police Chief, Public Works Director, Utilities Director, together with representatives from such other departments and offices as may be deemed necessary by the Chair or Director for effective operation;

Commentary. The formal structure of a recovery organization will vary from community to community. The department manager titles used obviously will vary widely. The important thing is inclusion of the broadest array of functions which may have a direct or indirect role in recovery and reconstruction. Also, formal leadership may vary by size and structure of local governmental organization. In a big-city environment, presence and availability of the Mayor or a Deputy Mayor may be important from a leadership standpoint, even though recovery in many instances is largely a staff-driven process. On the other hand, in a typical council-manager form of government, inclusion of the Mayor may not be very useful. The intent here is to provide a communications connection with the City Council as well as a ceremonial function.

4.3 Operations and Meetings. The Director shall have responsibility for Recovery Organization operations. When an emergency declaration is not in force, the Recovery Task Force shall meet monthly or more frequently, upon call of the Chair or Director. After a declaration of an emergency, and for the duration of that declared emergency period, the Recovery Task Force shall meet daily or as frequently as determined by the Director.

Commentary. The overall concept here is for the City Manager to run the recovery task force operations on behalf of the City Council, reserving the presence of the Mayor for those times when policy matters are being discussed or at critical junctures following a major disaster. In actuality, the City Manager inevitably becomes the pivotal party for informing and advising the City Council on recovery matters, interpreting Council policy and coordinating staff functions.

4.4 Succession. In the absence of the Director, the Assistant Directory shall serve as Acting Director and shall be empowered to carry out the duties and responsibilities of the Director. The Director shall name a succession of department managers to carry out the duties of the Director and Assistant Director, and to serve as Acting Director in the event of the unavailability of the Director and Assistant Director.

4.5 Organization. The Recovery Task Force may create such standing or ad hoc committees as determined necessary by the Director.

4.6 Relation to Emergency Management Organization. The Recovery Organization shall work in concert with the city Emergency Management Organization (or equivalent) which has interrelated functions and similar membership.

Commentary. As noted in the introductory paragraphs, there are certain fundamental differences in function which make it preferable to establish a recovery organization which can operate parallel to the emergency response organization. However, because of the inherent linkage of emergency preparedness and response with recovery, reconstruction and hazard mitigation functions, a close relationship must be

continuously maintained. For many purposes these overlapping organizations can meet and work jointly. The value of having a separate recovery organization is best recognized when hard core building, planning and redevelopment issues require extended attention during the pre-event planning phase or during the long months and years it is likely to take to fully rebuild.

Section 5. Recovery Plan. Before a major disaster, the Recovery Task Force shall prepare a pre-event plan for post-disaster recovery and reconstruction, referred to as the Recovery Plan, which shall be comprised of pre-event and post-disaster policies, plans, implementation actions, and designated responsibilities related to expeditious and orderly post-disaster recovery, rebuilding, and long-term hazard mitigation.

5.1 Recovery Plan Content. The Recovery Plan shall address policies, implementation actions and designated responsibilities for such subjects as business resumption, damage assessment, demolitions, debris removal and storage, expedited repair permitting, fiscal reserves, hazards evaluation, hazard mitigation, historical buildings, illegal buildings and uses, moratorium procedures, nonconforming buildings and uses, rebuilding plans, redevelopment procedures, relation to emergency response plan and comprehensive general plan, restoration of infrastructure, restoration of standard operating procedures, temporary and replacement housing, and such other subjects as may be appropriate to expeditious and wise recovery.

5.2 Coordination of Recovery Plan with FEMA and Other Agencies. The Recovery Plan shall identify relationships of planned recovery actions with those of state, federal or mutual aid agencies involved in disaster recovery, including but not limited to the Federal Emergency Management Agency (FEMA), the American Red Cross, the Department of Housing and Urban Development (HUD), the Small Business Administration (SBA), the Environmental Protection Administration (EPA), the Department of Transportation (DOT), the State Emergency Management Agency (or equivalent) and other entities which may provide assistance in the event of a major disaster. The Director shall distribute a draft copy of the plan to such agencies in sufficient time for comment prior to action on the Recovery Plan by the City Council.

Commentary. In contrast to most local emergency management organizations, FEMA has substantial recovery and reconstruction responsibilities. Since FEMA is the main source of funds made available by Congress under the Stafford Act for rebuilding private and public facilities, it is important to solicit from that agency as much advance information as can be obtained regarding post-disaster procedures essential to recovery and reconstruction.

5.3 Recovery Plan Adoption. Following formulation, the Recovery Plan shall be transmitted to the City Council for review and approval. The City Council shall hold one or more public hearings to receive comments from the public on the Recovery Plan. Following one or more public hearings, the City Council may adopt the

Recovery Plan by resolution, including any modifications deemed appropriate, or transmit the plan back to the Recovery Task Force for further modification prior to final action.

Commentary. Governing board adoption of this ordinance together with the pre-event plan is extremely important to its successful post-disaster implementation. The City Council needs to become comfortable with the concept of pre-event plan and ordinance adoption in order to feel confident in staff during post-disaster recovery operations. If Council adoption is not possible immediately because of the press of other business, look for opportunities to bring the plan and ordinance forward such as when a catastrophic disaster has struck in another jurisdiction.

5.4 Recovery Plan Implementation. The Director and Recovery Task Force shall be responsible for implementation of the plan both before and after a major disaster, as applicable. Before a declaration of emergency, the Director shall prepare and submit reports annually, or more frequently as necessary, to fully advise the City Council on the progress of preparation or implementation of the Recovery Plan. After a declaration of emergency in a major disaster, the Director shall report to the City Council as often as necessary on implementation actions taken in the post-disaster setting, identify policy and procedural issues, and receive direction and authorization to proceed with plan modifications necessitated by specific circumstances.

5.5 Recovery Plan Training and Exercises. The Recovery Task Force shall organize and conduct periodic training and exercises annually, or more often as necessary, in order to develop, convey and update the contents of the Recovery Plan. Such training and exercises will be conducted in coordination with similar training and exercises related to the Emergency Operations Plan.

Commentary. Clearly, training and exercises are functions which should happen on a joint, ongoing basis with the city's Emergency Management Organization. For greatest value, training and exercises should include careful attention to critical relationships between early post-disaster emergency response and recovery actions which condition long-term reconstruction, such as street closing and reopenings, demolitions, debris removal, damage assessment and hazards evaluation.

5.6 Recovery Plan Consultation with Citizens. The Recovery Task Force shall schedule and conduct community meetings, periodically convene advisory committees comprised of representatives of homeowner, business and community organizations, or implement such other means as to provide information and receive input from members of the public regarding preparation, adoption or amendment of the Recovery Plan.

5.7 Recovery Plan Amendments. During implementation of the Recovery Plan, the Director and the Recovery Task Force shall address key issues,

strategies and information bearing on the orderly maintenance and periodic revision of the plan. In preparing modifications to the plan, the Recovery Task Force shall consult with City departments, business and community organizations and other government entities to obtain information pertinent to possible Recovery Plan amendments.

5.8 Recovery Plan Coordination with Related (City, County)

Plans. The Recovery Plan shall be prepared in coordination with related elements of the Comprehensive General Plan and Emergency Master Plan, or such other plans as may be pertinent. Such related plan elements shall be periodically amended by the City Council to be consistent with key provisions of the Recovery Plan, and vice versa.

Section 6. General Provisions. The following general provisions shall be applicable to implementation of this chapter following a major disaster:

6.1 Powers and Procedures. Following a declaration of local emergency in a major disaster and while such declaration is in force, the Director and the Recovery Task Force shall have authority to exercise powers and procedures authorized by this chapter, subject to extension, modification or replacement of all or portions of these provisions by separate ordinances adopted by the City Council.

6.2 Post-Disaster Operations. The Director shall direct and control post-disaster recovery and reconstruction operations, including but not limited to the following:

- a. Activate and deploy damage assessment teams to identify damaged structures and to determine further actions which should be taken regarding such structures;
- b. Activate and deploy hazards evaluation teams to locate and determine the severity of natural or technological hazards which may influence the location, timing and procedures for repair and rebuilding processes;
- c. Maintain liaison with the City emergency operations organization and other public and private entities, such as FEMA, the American Red Cross, and the State Emergency Management Agency (or equivalent) in providing necessary information on damaged and destroyed buildings or infrastructure, natural and technological hazards, street and utility restoration priorities, temporary housing needs and similar recovery concerns;
- d. Establish "one-stop" field offices located in or near impacted areas, staffed by trained personnel from appropriate departments, to provide information about repair and rebuilding procedures, issue repair and reconstruction permits, and provide information and support services on such matters as business resumption, industrial recovery, and temporary and permanent housing;
- e. Activate streamlined procedures to expedite repair and rebuilding of properties damaged or destroyed in the disaster;

- f. Recommend to the City Council and other appropriate entities necessary actions for reconstruction of damaged infrastructure;
- g. Prepare plans and proposals for action by the City Council for redevelopment projects, redesign of previously established projects or other appropriate special measures addressing reconstruction of heavily damaged areas;
- h. Formulate proposals for action by the City Council to amend the Comprehensive General Plan, Emergency Master Plan and other relevant pre-disaster plans, programs and regulations in response to new needs generated by the disaster;
- i. Such other recovery and reconstruction activities identified in the Recovery Plan or by this chapter, or as deemed by the Director as necessary to public health, safety and well-being.

6.3 Coordination with FEMA and Other Agencies. The Director and Recovery Task Force shall coordinate recovery and reconstruction actions with those of state, federal or mutual aid agencies involved in disaster response and recovery, including but not limited to the Federal Emergency Management Agency (FEMA), the American Red Cross, the Department of Housing and Urban Development (HUD), the Small Business Administration (SBA), the State Emergency Management Agency (or equivalent) and other entities which provide assistance in the event of a major disaster. Intergovernmental coordination tasks including but not limited to the following:

- a. Assign trained field personnel to provide information and logistical support to the FEMA Disaster Field Office;
- b. Supply personnel to provide information support for FEMA Disaster Assistance Centers (DACs);
- c. Participate in damage assessment surveys conducted in cooperation with FEMA and other entities;
- d. Participate in the Multi-Agency Hazard Mitigation Team with FEMA and other entities;
- e. Cooperate in the joint establishment with other agencies of one-stop service centers for issuance of repair and reconstruction permits, business resumption support, counseling regarding temporary and permanent housing, and other information regarding support services available from various governmental and private entities;
- f. Coordinate within city government the preparation and submittal of Disaster Survey Reports (DSRs) to FEMA;
- g. Determine whether damaged structures and units are within floodplains identified on Flood Insurance Rate Map (FIRM) maps and whether substantial damage has occurred;
- h. Implement such other coordination tasks as may be required under the specific circumstances of the disaster.

Commentary. To provide direction for handling emergency response, relief and recover in relation to major disasters, Congress has enacted the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended). A substantial portion of the Stafford Act is devoted to the means by which federal funds are distributed to persons, businesses, local governments and state governments for disaster relief and recovery. For most communities this is an important means by which disaster losses can be compensated, at least in part. Although insurance can be instrumental in person or business loss recovery for major hurricane, flood and fire disaster damage, it has little value for compensation from losses incurred from disasters for which insurance is too costly or difficult to obtain, such as for earthquake damage, and no value for circumstances which are uninsured. Some of the federal assistance is in the form of grants and loans, involving not only FEMA but also other agencies such as HUD and SBA. The federal government has become increasingly interested in promoting more effective means of coordinating post-disaster victim services as well as mitigating hazards having to do with land use and building construction. Consequently, federal assistance to localities in many instances is contingent upon the adjustment of local city or county recovery and hazard mitigation policies and practices. In other words, as with many other forms of more traditional assistance, the community may not always be able to do things its own way if it desires federal post-disaster assistance.

6.4 Consultation with Citizens. The Director and the Recovery Task Force shall schedule and conduct community meetings, convene ad hoc advisory committees comprised of representatives of business and community organizations, or implement such other means as to provide information and receive input from members of the public regarding measures undertaken under the authority of this chapter.

Commentary. One of the critical components in establishing a relatively successful relationship between local government and disaster victim organizations after the City of Oakland firestorm was the series of weekly meetings held in the affected area by the Assistant City Manager. Direct outreach to the community should be established in advance of a major disaster through neighborhood safety or similar programs conducted by fire and law enforcement officials, ideally in conjunction with preparation of a pre-event plan. Following a major disaster, proactive outreach is critical to establishing a two-way flow of information, without which controversy inherent in post-disaster settings can become severe.

Section 7. Temporary Regulations. The Director shall have the authority to administer the provisions of this section temporarily modifying provisions of the Municipal Code (or equivalent) dealing with building and occupancy permits, demolition permits, and restrictions on the use, development or occupancy of private property, provided that such action, in the opinion of the Director, is reasonably justifiable for protection of life and property, mitigation of hazardous conditions,

avoidance of undue displacement of households or businesses, or prompt restoration of public infrastructure.

Commentary. The following temporary regulations are at the heart of the recovery process. Although existing state law or city ordinances may already authorize some of these functions, it is preferable to have a single source of locally adopted ordinance which, among other things, identifies regulatory functions related to post-disaster recovery, clearly places responsibility for implementation, and provides a coordinated rationale for city intervention in case of challenge. Among the components of these temporary regulations are provisions dealing with duration, damage assessment, development moratoria, debris clearance, permit expediting, temporary uses and repairs, deferral of fees, nonconforming buildings and uses, condemnation and demolition, and temporary and permanent housing. Each of these components needs careful examination and, as appropriate, adjustment based on local policies and conditions. However, pre-event adoption of this ordinance adjusted to take into account local circumstances provides a solid basis for initial post-disaster action. It is not possible to anticipate the exact character, magnitude and distribution of damage from a major disaster. However, pre-adopted regulations provide a basis for more efficient action which is substantially less subject to policy reversals and other uncertainties typically found in cities which have not prepared in this manner.

7.1 Duration. The provisions of this section shall be in effect for a period of six months from the date of a local emergency declaration following a major disaster or until termination of a state local emergency, whichever occurs later, or until these provisions are extended, modified, replaced by new provisions, or terminated, in whole or in part, by action of the City Council through separate ordinances.

Commentary. This provision allows for flexibility in the duration of application of the temporary regulations, so that any portion can be terminated, modified, or extended depending upon local circumstances. It also reflects a recognition that "temporary" regulations may be in effect for an extended period of time beyond either termination of the local emergency or passage of the six month period. In reality, such temporary provisions are often in effect for several years after the disaster, as necessary.

7.2 Damage Assessment. The Director shall direct damage assessment teams having authority to conduct field surveys of damaged structures and post placards designating the condition of such structures as follows:

- a. Inspected—Lawful Occupancy Permitted** is to be posted on any building in which no apparent structural hazard has been found. This does not mean there are not other forms of damage which may temporarily affect occupancy.

Commentary. This is commonly known as the "green tag" placard.

- b. **Restricted Use** is to be posted on any building in which damage has resulted in some form of restriction to continued occupancy. The individual posting this placard shall note in general terms the type of damage encountered and shall clearly and concisely note the restrictions on continued occupancy.

Commentary. This is commonly known as the "yellow tag" placard.

- c. **Unsafe—Do Not Enter or Occupy** is to be posted on any building that has been damaged to the extent that continued occupancy poses a threat to life safety. Buildings posted with this placard shall not be entered under any circumstances except as authorized in writing by the department that posted the building or by authorized members of damage assessment teams. The individual posting this placard shall note in general terms the type of damage encountered. This placard is not to be considered a demolition order.

Commentary. This is commonly known as the "red tag" placard.

- d. This chapter and section number, the name of the department, its address, and phone number shall be permanently affixed to each placard.
- e. Once a placard has been attached to a building, it shall not be removed, altered or covered until done so by an authorized representative of the department or upon written notification from the department. Failure to comply with this prohibition will be considered a misdemeanor punishable by a \$300 fine.

Commentary. Damage assessment and the placement of placards identifying whether or not buildings are safe or unsafe to occupy are two functions having perhaps the most profound effects on life, property and community recovery than any other within the post-disaster decision and action sequence towards which the provisions of these temporary regulations are directed. Damage assessment is undertaken by various entities following a major disaster, usually the city and FEMA. There is at least a twofold purpose for these inspections. One is to determine the degree of structural damage of each building and notify the public about the relative safety of entry and occupancy. This has been a long-standing duty under local government public health and safety responsibilities with which building departments are usually very familiar.

The other is to quickly estimate the approximate replacement costs of damaged buildings and other property in order to inform the state and federal governments of dollar amounts needed for emergency legislative authorizations. The latter purpose is fraught with difficulty to the extent that hurriedly conducted damage assessments can miss substantial elements of damage and corresponding costs. Moreover, local

expertise tends to be limited in the area of deploying common standards and procedures for determining structural damage in order to assess damage in a truly comparable manner. Additionally, most local governments have not yet invested in damage assessment reporting techniques which take advantage of advances in information technology, such as hand-held digital recording devices which can be downloaded by telephone or satellite to a central computer to quickly assemble data from the field.

*The most important element of all these concerns is the establishment of standard identification of structural damage both in gross general terms reflected in the red, yellow and green tag placard systems, as well as in the details recorded regarding each building. This ordinance reflects only the standard placard system, leaving to the building professionals the means by which such determinations are made and recorded in detail. The source of the language for the placard system in this model ordinance is a publication by the California Governor's Office of Emergency Services titled **Model Ordinances for Post-Disaster Recovery and Reconstruction**. The procedure used to make these basic safety distinctions in the California model ordinance are based on detailed post-disaster inspection methods described by the Applied Technology Council in a publication titled **ATC-20, Procedures for Postearthquake Safety Evaluation of Buildings**, and in the State of California's publication titled **Post-Disaster Safety Assessment Plan**. While somewhat oriented toward structural damage from earthquakes due to California's known seismicity, the placard system is adaptable to other disasters. For additional references regarding damage assessment safety notifications, the reader is referred to the International Conference of Building Officials and similar organizations.*

7.3 Development Moratorium. The Director shall have the authority to establish a moratorium on the issuance of building permits, approval of land use applications or other permits and entitlements related to the use, development and occupancy of private property authorized under other chapters and section of the Municipal Code and related ordinances, provided that, in the opinion of the Director, such action is reasonably justified for protection of life and property and subject to the following:

- a. **Posting**—Notice of the moratorium shall be posted in a public place and shall clearly identify the boundaries of the area in which a moratorium is in effect as well as the exact nature of the development permits or entitlements which are temporarily held in abeyance;
- b. **Duration**—The moratorium shall be in effect subject to review by the City Council at the earliest possible time, but no later than 90 days, at which time the Council shall take action to extend, modify or terminate such moratorium by separate ordinance.

Commentary. After disasters around the world, the prevailing sentiment often is to act quickly to replicate pre-disaster building patterns. In many instances, this sentiment

prevails as policy despite the presence of a severe natural hazard condition, thus reinforcing the chances of repeating the disaster. The most notable example has been the rebuilding of homes in the Turnagain Heights area on land severely deformed by a landslide in the 9+ Magnitude 1964 Anchorage earthquake.

To prevent or lessen the chances of repetition of the disaster, it may be necessary for a city to interrupt and forestall repair and rebuilding long enough to assess rebuilding options and/or to determine effective means of mitigation. The city may wish to establish an emergency moratorium on issuance of repair and rebuilding permits or on land use approvals in areas where severely hazardous conditions are identified. The hazard may be newly detected, as in a post-earthquake circumstance where the pattern of damage or ground deformation may indicate the need for geologic studies to clearly identify such hazards as landslides, liquefaction or fault rupture. On the other hand, the hazardous condition may be a well known cause of prior damaging disasters, as in the Oakland Hills firestorm area which had a long history of previous fires, or communities affected by the 1993 Midwestern floods where prior flood control and floodproofing efforts were proven ineffective.

A moratorium on development may be important for a city to undertake from the standpoint of enlightened public policy. However, since such action may be extremely controversial and unpopular, it is important to lay the ground work with the community in advance, if possible. This subsection provides prior authorization through adoption of this ordinance before a major disaster, whereby city staff can act expeditiously in a post-disaster setting to forestall premature issuance of permits in areas shown to be hazardous. Such action is necessarily subject to Council review, ratification, modification or termination.

7.4 Debris Clearance. The Director shall have the authority to remove from public rights-of-way debris and rubble, trees, damaged or destroyed cars, trailers, equipment, and other private property, without notice to owners, provided that in the opinion of the Director such action is reasonably justifiable for protection of life and property, provision of emergency evacuation, assurance of firefighting or ambulance access, mitigation of otherwise hazardous conditions, or restoration of public infrastructure.

Commentary. Although clearance of privately owned debris is routinely considered a function of local government, it can become very controversial where owners take the position that such property is salvageable and has value (e.g., used brick after an earthquake). Pre-event adoption of such a provision reinforces the expectation that debris clearance functions will be carried out decisively, thus minimizing a problem otherwise compounded by city hesitation or ambiguity of intention.

7.5 One-Stop Center for Permit Expediting. The Director shall establish a one-stop center, staffed by representatives of pertinent departments, for the purpose of establishing and implementing streamlined permit processing to

expedite repair and reconstruction of buildings, and to provide information support for provision of temporary housing and encouragement of business resumption and industrial recovery. The Director shall establish such center and procedures in coordination with other governmental entities which may provide services and support, such as FEMA, SBA, HUD, or the State Emergency Management Agency (or equivalent).

Commentary. One-stop permit centers have become more common with recent major disasters, often combining the presence of multiple agencies to provide better coordination of information which disaster victims may need in order to rebuild. A prime example was the Community Restoration and Development Center established by the City of Oakland shortly after the 1991 firestorm and operated until mid-1994 with financial support from FEMA. Benefits to be gained for establishing a special one-stop center include not only accelerated review but also integration of information and permitting functions. Setting up a special team of specialists working exclusively on repair and rebuilding permit issues has the added advantage of insulating normal development review from disruption by the recovery process and vice versa.

7.6 Temporary Use Permits. The Director shall have the authority to issue permits in any zone for the temporary use of property which will aid in the immediate restoration of an area adversely impacted by a major disaster, subject to the following provisions:

- a. **Critical Response Facilities**—Any police, fire, emergency medical or emergency communications facility which will aid in the immediate restoration of the area may be permitted in any zone for the duration of the declared emergency;
- b. **Other Temporary Uses**—Temporary use permits may be issued in any zone, with conditions, as necessary, provided written findings are made establishing a factual basis that the proposed temporary use: 1) will not be detrimental to the immediate neighborhood; 2) will not adversely affect the Comprehensive General Plan or any applicable specific plan; and 3) will contribute in a positive fashion to the reconstruction and recovery of areas adversely impacted by the disaster. Temporary use permits may be issued for a period of one year following the declaration of local emergency and may be extended for an additional year, to a maximum of two years from the declaration of emergency, provided such findings are determined to be still applicable by the end of the first year. If, during the first or second year, substantial evidence contradicting one or more of the required findings comes to the attention of the Director, then the temporary use permit shall be revoked.

Commentary. Most zoning ordinances have no provisions for temporary use of property following a disaster. A few allow temporary placement of mobile homes on

residentially zoned sites pending reconstruction of a residence. Time limits vary, but are usually for a two-year period. After a major disaster, special latitude may be needed, however, to support various recovery needs. Care must be taken not to set precedents which will erode or destroy a pre-existing pattern of zoning which the city may wish to protect.

*The language within this section is modeled after provisions of the Los Angeles recovery ordinance adopted after the Northridge earthquake, titled **Temporary Regulations Relating to Land Use Approvals for Properties Damaged in a Local Emergency**. That ordinance is geared toward the needs of a large and diverse city. Smaller communities may wish to restrict temporary uses to those already allowed by the zone in which they are located, limiting the provision to temporary structures such as tents, domes, or mobile units.*

7.7 Temporary Repair Permits. Following a disaster, temporary emergency repairs to secure structures and property damaged in the disaster against further damage or to protect adjoining structures or property may be made without fee or permit where such repairs are not already exempt under other chapters of the Municipal Code. The building official must be notified of such repairs within ten working days, and regular permits with fees may then be required.

*Commentary. This provision is specifically written for repairs which may not be exempt under standard building code permit exemptions but which are justifiable from a public health and safety standpoint to avoid further damage to property after a disaster. It is modeled after a provision of a post-disaster rebuilding ordinance adopted in 1992 by the County of San Bernardino shortly after the Landers-Big Bear earthquake. Written before the earthquake, the ordinance was based on a pre-event study titled **Post-Disaster Rebuilding Ordinance and Procedures**, which included a survey of top managers and elected officials regarding various post-disaster rebuilding provisions, such as for nonconforming buildings and uses. Because of the pre-event involvement of top managers and elected officials, it was adopted after the earthquake with no controversy.*

7.8 Deferral of Fees for Reconstruction Permits. Except for temporary repairs issued under provisions of this chapter, all other repairs, restoration and reconstruction of buildings damaged or destroyed in the disaster shall be approved through permit under the provisions of other chapters of this Code. Fees for such repair and reconstruction permits may be deferred until issuance of certificates of occupancy.

Commentary. Pressure to waive or defer processing fees frequently arises after a disaster when victims are unsure of their sources of financing for rebuilding. It is inadvisable to succumb to pressures to waive fees entirely due to the need for cost recovery for disaster related services at a time when there may be substantial uncertainties in revenue flows. Also, it is helpful to buy time to determine the degree

to which sources other than the victims may help offset fee costs. For example, sometimes insurance will cover the cost of processing fees. Also, such costs have been covered by FEMA. Deferral of fees until occupancy permit issuance provides time in which such alternate sources can be worked out, without sacrificing the basic revenue flow to the city treasury. This provision is modeled after similar language in the Los Angeles temporary regulations.

- 7.9 Nonconforming Buildings and Uses.** Buildings damaged or destroyed in the disaster which are legally nonconforming as to use, yards, height, number of stories, lot area, floor area, residential density, parking or other provisions of the Municipal Code may be repaired and reconstructed in-kind, provided that:
- a. the building is damaged in such a manner that the structural strength or stability of the building is appreciably lessened by the disaster and is less than the minimum requirements of the Municipal Code for a new building;
 - b. the cost of repair would exceed 50 percent of the replacement cost of the building;
 - c. all structural, plumbing, electrical and related requirements of the Municipal Code are met at current standards;
 - d. all natural hazard mitigation requirements of the Municipal Code are met;
 - e. reestablishment of the use or building is in conformance with the national Flood Insurance Rate Map requirements and procedures;
 - f. the building is reconstructed to the same configuration, floor area, height, and occupancy as the original building or structure;
 - g. no portion of the building or structure encroaches into an area planned for widening or extension of existing or future streets as determined by the comprehensive general plan or applicable specific plan;
 - h. repair or reconstruction shall commence within two years of the date of the declaration of local emergency in a major disaster and shall be completed within two years of the date on which permits are issued.

Nothing herein shall be interpreted as authorizing the continuation of a nonconforming use beyond the time limits set forth under other sections of the Municipal Code that were applicable to the site prior to the disaster.

Commentary. No issue can be more vexing to planners than whether or not to encourage reestablishment of nonconforming uses and buildings after a major disaster. Planners have sought for decades to write strict provisions in zoning ordinances designed to gradually eliminate nonconforming uses or buildings as they were abandoned, changed owners, or were damaged by fire, wind, or water. The latter provisions normally prohibit reestablishment of nonconforming uses and buildings where damage exceeds a certain percentage of replacement cost, most often 50%. This approach is logical, orderly and normally equitable when weighing

community interests balanced with those of the property owner. However, the thinking behind such provisions has been geared to incremental adjustments or termination of such uses over time, not to sudden catastrophic circumstances forcing attention to disposition of such uses as a class at a single point in time.

In theory, disasters represent an opportunity to upgrade conditions such as parking deficiencies attributable to the nonconforming status of a building or use. More fundamentally, disasters are seen as an opportunity to eliminate uses which conflict with the prevailing pattern in a neighborhood but which remain because of legal nonconforming status—for example, scattered industrial uses in a residentially zoned neighborhood. In reality, however, after a major disaster local governments are normally beset by severe pressures from property owners and other community interests to reestablish the previous development pattern exactly as it previously existed, including nonconforming buildings and uses. Moreover, such pressures extend beyond the demand to reestablish nonconforming buildings or uses to include waiver of current building plumbing, and electrical code provisions to the standards in place at the time of construction. From a risk management, liability exposure or public safety standpoint, acquiescence to the reduction of standards in the face of a known hazard can be seen as clearly unacceptable by city councils. However, zoning provisions hindering reestablishment of nonconforming buildings and uses tend to be more arguable and are more likely to be modified by city councils under extreme pressures of the moment to restore the prior status quo.

In recognition of such pressures, this model ordinance language offers a straightforward tradeoff which allows reestablishment of a nonconforming use or building in turn for strict adherence to structural, plumbing and electrical code and related hazard mitigation requirements. The language assumes the existence of a commonly found provision in the Municipal Code authorizing repair or reestablishment of a nonconforming use or building where damage is less than 50% of the replacement cost. It also assumes that the building was substantially weakened by the disaster and is below present code requirements.

This compromise approach recognizes that its application may require the unwelcome decision to accept continuation of disorderly land use patterns, unless a solution can be found through redevelopment or rezoning. Instead, it replaces a high value on life safety. This is an uneasy balance not unlike integration of other health and safety measures such as unaesthetic balance not unlike integration of other health and safety measures such as unaesthetic transportation facilities or placement of locally unacceptable land uses (LULUs) like sewer plants into the community pattern.

It is important to note that the language of these provisions includes important limitations which tend to limit the economic incentive to reestablish the nonconforming use or building. 1) It does not extend any previously stipulated life of the nonconforming use—an important disincentive if the costs of replacement cannot be offset by insurance, FEMA assistance, SBA loans or other sources of financial support.

2) It does not allow the extent of nonconformance to be increased over what existed prior to the disaster, thwarting another common pressure. 3) It requires strict adherence to existing structural, plumbing, electrical and other requirements of the Municipal Code as well as any street setbacks stipulated within the comprehensive plan circulation element and related ordinances. This may be especially costly from a structural standpoint, for example, when replacing previously unreinforced masonry buildings after a devastating earthquake. 4) It recognizes that compliance with more stringent hazard mitigation requirements may be needed, especially in cases involving increased on-site hazards because of fault rupture, landsliding, coastal erosion, or severe flooding where upgrading to current structural, plumbing and electrical code requirements isn't enough. Compliance with the latter provision may also be sufficiently costly to discourage reestablishment of the use or other nonconforming feature.

The relative importance of post-disaster reestablishment of nonconforming uses and buildings may vary greatly from jurisdiction to jurisdiction. Therefore, the most useful time to assess this aspect of post-disaster recovery is before a major disaster, in the course of pre-event planning. Education of the city council in advance can help lessen post-disaster tendencies to compromise critical hazard mitigation and public safety requirements, notwithstanding the outcome on nonconforming use and building requirements.

Section 8. Demolition of Damaged Historic Buildings. The Director shall have authority to order the condemnation and demolition of buildings and structures damaged in the disaster under the standard provisions of the Municipal Code, except as otherwise indicated below:

8.1 Condemnation and Demolition. Within ____ days after the disaster, the building official shall notify the State Historic Preservation Officer that one of the following actions will be taken with respect to any building or structure determined by the building official to represent an imminent hazard to public health and safety, or to pose an imminent threat to the public right of way:

- a. Where possible, within reasonable limits as determined by the building official, the building or structure shall be braced or shored in such a manner as to mitigate the hazard to public health and safety or the hazard to the public right of way;
- b. Whenever bracing or shoring is determined not to be reasonable, the building official shall cause the building or structure to be condemned and immediately demolished. Such condemnation and demolition shall be performed in the interest of public health and safety without a condemnation hearing as otherwise required by the Municipal Code. Prior to commencing demolition, the building official shall photographically record the entire building or structure.

8.2 Notice of Condemnation. If, after the specified time frame noted in Subsection 8.1 of this chapter and less than 30 days after the disaster, a historic building or structure is determined by the building official to represent a hazard to the health and safety of the public or to pose a threat to the public right of way, the building official shall duly notify the building owner of the intent to proceed with a condemnation hearing within ____ business days of the notice in accordance with Municipal Code Section ____; the building official shall also notify FEMA, in accordance with the National Historic Preservation Act of 1966, as amended, of the intent to hold a condemnation hearing.

8.3 Request to FEMA to Demolish. Within 30 days after the disaster, for any historic building or structure which the building official and the owner have agreed to demolish, the building official shall submit to FEMA, in accordance with the National Historic Preservation Act of 1966, as amended, a request to demolish. Such request shall include all substantiating data.

8.4 Historic Building Demolition Review. If after 30 days from the event, the building official and the owner of a historic building or structure agree that the building or structure should be demolished, such action will be subject to the review process established by the National Historic Preservation Act of 1966, as amended.

Commentary. One of the more difficult aspects of post-disaster response and recovery in older communities is the existence of damaged historically significant structures. Sine these can be very old, measures needed to make them structurally sound may be more difficult and costly and complicated than normal. Because of the emotion frequently attached to this issue and the often widely conflicting views, community controversy can erupt when a badly damaged historical structure is subject to demolition. Therefore, it is wise to have language already in place to guide the planning and building officials involved.

Because of such problems with seemingly premature or unjustifiable demolition of historic structures in previous disasters, the National Historic Preservation Act of 1966, as amended, identifies steps that must be taken by a jurisdiction or owner to mitigate public health and safety hazards resulting from disaster-caused damage. The intent is to establish predictable rules by which proposed demolitions, except in extreme cases of danger to the public, can be reviewed by state and federal officials in order to provide time to identify options for preservation of a damaged historic building or structure. The review process is also intended to discourage hasty demolition action by local officials when such action may not be justified.

*The preceding language is adapted from California's **Model Ordinances for Post-Disaster Recovery and Reconstruction**. This language supplements provisions of the **Uniform Code for the Abatement of Dangerous Buildings** by providing specific time frames and actions for abatement of hazards created by damage to*

historic buildings. The important element of local judgment here is the establishment of a specific time frame for declaring a structure an imminent hazard to public health and safety justifying immediate demolition without a condemnation hearing. Such time frames are generally from three to five days, though sometimes stretched to ten. After the established time frame, the threat may no longer be justified as imminent and, therefore, the remaining procedures kick in.

Section 9. Temporary and Permanent Housing. The Director shall assign staff to work with FEMA, SBA, HUD, the State Emergency Management Agency (or equivalent) and other appropriate governmental and private entities to identify special programs by which provisions can be made for temporary or permanent replacement housing which will help avoid undue displacement of people and businesses. Such programs may include deployment of mobile homes and mobile home parks under the temporary use permit procedures provided in Section 7 of this chapter, use of SBA loans and available Section 8 and Community Development Block Grant funds to offset repair and replacement housing costs, and other initiatives appropriate to the conditions found after a major disaster.

Commentary. The issue of post-disaster temporary and permanent replacement housing has grown to one of critical dimensions since the Loma Prieta earthquake. After that earthquake, many displaced low-income occupants of damaged or destroyed housing simply disappeared—a common pattern following many disasters. Relatively little real progress has been made since then in finding effective ways by which to handle this issue on a broad scale. For example, after the Northridge earthquake, HUD became active immediately in attempting to assist localities in dealing with housing issues. Available resources were insufficient to cover the cost of much of the replacement housing needed. Housing issues were extremely complex. Low-moderate income rental housing replacement problems were somewhat alleviated by the existence of a high rate of apartment vacancies. However, recession-generated housing devaluation combined with substantial damage costs altered loan-to-value ratios to uneconomical levels. Repairs of single family and multifamily buildings dragged out for many months due to lending, engineering, and permitting problems. As a consequence, some middle-income households simply walked away from mortgages. The most visible evidence of earthquake-induced housing impacts were the large condominium and apartment complexes which remained in a fenced-off, unrepaired state until financing and repairs began to catch up two years later.

For these reasons, this section is essentially a placeholder for language which preferably should be made more specific on the basis of a pre-event plan for post-disaster recovery and reconstruction which takes into account the level of local housing vulnerability. For example, a community with a long history of flooding may have developed temporary shelter arrangements, such as in school gymnasiums, sufficient for short-term displacement. If there are no other hazards present, that community may not need to consider replacement housing. Whereas a community in an earthquake hazard prone area with a large portion of its housing inventory in

unreinforced masonry (URM) construction should consider both temporary shelters and interim housing such as mobile homes with the expectation that several years will be needed for replacement housing to be built.

A great deal more research is needed to find satisfactory solutions for prompt, efficient provision of both interim and replacement housing. Clearly, the magnitude of the Northridge housing problems caught public and private sector institutions off-guard. Little is yet understood regarding issues such as the most effective means by which to deal with damaged condominiums or the effect of the secondary mortgage market on housing repair and replacement. With downsizing of federal budgets in future years, this issue will become more critical since levels of support could be diminished. Also needed is more intensive research on feasible incentives for retrofitting a substantial portion of the existing housing stock to reduce vulnerability and risk. This is true not only for California and other western states normally associated with earthquake risk, but also for Midwestern and southeastern states under threat of a major earthquake on the New Madrid Fault.

Section 10. Hazard Mitigation Program. Prior to a major disaster, the Director shall establish a comprehensive hazard mitigation program, which includes both long-term and short-term components:

10.1 Safety Element. The long-term component shall be prepared and adopted by resolution of the City Council as the safety element of the City Comprehensive General Plan, for the purpose of enhancing long-term safety against future disasters. The safety element shall identify and map the presence, location, extent and severity of natural hazards, such as:

- a. severe flooding;
- b. wildland and urban fires;
- c. seismic hazards such as ground shaking and deformation, fault rupture, liquefaction, tsunamis and dam failure;
- d. slope instability, mudslides, landslides and subsidence;
- e. coastal erosion;
- f. hurricanes and other high winds;
- g. technological hazards, such as oil spills, natural gas leakage and fires, hazardous and toxic materials contamination, nuclear power plant and radiological accidents.

The safety element shall determine and assess the community's vulnerability to such known hazards and shall propose measures to be taken both before and after a major disaster to mitigate such hazards.

Commentary. Although California may be viewed by some citizens in other parts of the country as perhaps atypical when considering life styles, ideas, the arts, or politics, it nevertheless has been the source of much forward-looking planning legislation and has recently become the site of a series of major natural disasters from which important post-disaster response and recovery lessons are being learned. One of the

far-seeing components of planning legislation in California is the mandatory general plan safety element, which became a requirement after the 1971 Sylmar earthquake. Now, over twenty years after the passage of that legislation, virtually all California cities have adopted safety elements as part of their comprehensive general plans, and many have implemented them in one specific way or another which has helped mitigate recognized hazards.

*The safety element concept can be adapted for use in many other states to help localities deal more directly with significant local hazards. Its great value is the establishment of safety considerations at the policy level and the development of hazard mapping which can serve as an undergirding for specific regulations. This can be helpful in providing greater legal defensibility of regulations establishing substantial restrictions on the use of portions of properties subject to a natural hazard, such as landslides, flooding or beach erosion. Such considerations are important in taking into account the after effects of the **Lucas** decision in the planning community.*

This concept also represents a proactive approach to hazard mitigation which can be portrayed locally as far preferable as an instrument of local control to measures which state or federal agencies may seek to impose in a post-disaster setting once substantial damage has been done. Although federal hazard mitigation requirements may become inevitable where federal reimbursements are sought locally, development of local safety elements may prove a useful means of preparing the community and perhaps averting the damage which might otherwise justify stronger, more costly mitigation requirements.

There is a growing body of knowledge about the nature of many of the hazards identified in this language, yet there remains a need for further research on how to integrate this knowledge in planning practice. A need exists for more definitive guidelines on how to mitigate many of these hazards through community design and site layout. For instance, with respect to wind, it was found on the Island of Kauai following Hurricane Iniki that homes placed along the windward edge of bluffs suffered greater damage than homes that were set back. It was also found that directional placement of roof overhangs in relation to prevailing direction of storm winds was important to the degree of damage. Such practical community design knowledge on wind effects should be extended and integrated with research on other hazards. Much needed is research material providing guidance on mitigation through community design for all natural hazards.

10.2 Short-Term Action Program. A short-term hazard mitigation program shall be included in the Recovery Plan. It shall be comprised of hazard mitigation program elements of highest priority for action, including preparation and adoption of separate ordinances dealing with specific hazard mitigation and abatement measures, as necessary. Such ordinances may require special site planning, land use and development restrictions or structural measures in areas affected by flooding,

urban/wildland fire, wind seismic or other natural hazards, or remediation of known technological hazards such as toxic contamination.

Commentary. This provision extends the safety element concept into the pre-event planning for post-disaster recovery and reconstruction process, identifying key measures which would have the most value for short-term implementation. Some of these measures, such as special ordinances related to flood plain management may already be in place. The concept here is to look beyond measures that are in place to determine others which are critically needed and to move forward toward their implementation.

10.3 Post-Disaster Actions. Following a major disaster, the Director shall participate in the Multi-Agency Hazard Mitigation Team with FEMA and other entities, as called for in Section 409 of the Stafford Act and related federal regulations. As appropriate, the Director may recommend to the City Council that the City participate in the Hazard Mitigation Grant Program, authorized in Section 404 of the Stafford Act in order to partially offset costs of recommended hazard mitigation measures.

Commentary. This provision acknowledges FEMA programs presently operating under the Stafford Act and corresponding federal regulations. FEMA has published guidelines relative to local implementation of these regulations. More recently, FEMA has initiated a nationwide effort toward increasing emphasis on hazard mitigation as a means of reducing disaster losses. A series of forums sponsored by FEMA in many cities throughout the country will lead to the publication of the National Mitigation Strategy, designed to put mitigation practice on a more proactive footing.

10.4 New Information. As new information is obtained regarding the presence, location, extent, location, and severity of natural or technological hazards, or regarding new mitigation techniques, such information shall be made available to the public, and shall be incorporated as soon as practicably possible within the Comprehensive General Plan safety element and the Recovery Plan through amendment.

Section 11. Recovery and Reconstruction Strategy. At the earliest practicable time following the declaration of local emergency in a major disaster, the Director and the Recovery Task Force shall prepare a strategic program for recovery and reconstruction.

11.1 Functions. To be known as the Recovery Strategy, the proposed strategic program shall identify and prioritize major actions contemplated or under way regarding such essential functions as business resumption, economic reinvestment, industrial recovery, housing replacement, infrastructure restoration, and potential sources of financing to support these functions.

11.2 Review. The Recovery Strategy shall be forwarded to the City Council for review and approval following consultation with FEMA, other governmental agencies, and business and citizen representatives. The Recovery Strategy shall provide detailed information regarding proposed and ongoing implementation of initiatives necessary to the expeditious fulfillment of critical priorities and will identify amendment of any other plans, codes or ordinances which might otherwise contradict or otherwise block strategic action. The Director shall periodically report to the City Council regarding progress toward implementation of the Recovery Strategy, together with any adjustments which may be called for by changing circumstances and conditions.

Commentary. The concept of this provision is to structure the flow of local post-disaster recovery and reconstruction actions around a short-term strategy which extends the pre-event plan into greater detail at the earliest possible time after a major disaster. This may provide absolutely essential to the extent that damage conditions differ substantially from those anticipated as part of the pre-event plan. In any case, development of such a strategy in the early days of recovery has the special benefit of adding a proactive emphasis to the recovery process to counter the overwhelmingly reactive context. It can be updated as often as necessary as experience is gained and new issues emerge. It also has the added benefit of providing a source from which the pre-event recovery plan and related plans can later be readily updated.

Section 12. Severability. If any provision of this chapter is found to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining provisions which can be implemented without the invalid provision, and, to this end, the provisions of this ordinance are declared to be severable.

APPENDIX M